



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,611	11/09/2001	Mei Kodama	IS8-011	4224
21567	7590	03/23/2006	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			MANNING, JOHN	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/007,611	Applicant(s) KODAMA, MEI	
	Examiner John Manning	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2 and 5-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Christopoulos et al. (US Pat App Pub No 2001/0047517).

In regard to claim 1, Christopoulos discloses a method and apparatus "for performing intelligent transcoding of multimedia data between two or more network elements in a client-server or client-to-client service provision environment" (Abstract). The claimed limitation recited in the preamble of "[a] multimedia information processing device in which content information, such as still image data, audio data, text data and movie image data, having non-layered structures, layered structures or structures in combination therewith is formed to have a layer structure, deleted, restored or added" is met by the system shown in Figure 1 and the layered information utilized as shown in Figure 4. The claimed limitation of "an internal structural information generator for generating internal structural information by analyzing internal structures of said content information having layered structures or non-layered structures" is met by Figure 4. "If the still image is stored in JPEG2000, a scaling based method for region of interest

coding can be used. This region of interest scaling-based method scales up (shift up) coefficients of the image so that the bits associated with the region of interest are placed in higher bit-planes. During the embedded coding process of a JPEG2000 image, region of interest bits are placed in the bitstream before the non-region of interest elements of the image. Depending upon the scaling value, some bits of the region of interest coefficients may be encoded together with non-region of interest coefficients. Accordingly, the region of interest information of the image will be decoded, or refined, before the rest of the image if a full decoding of the bitstream results in a reconstruction of the whole image with the highest fidelity available. If the bitstream is truncated, or the encoding process is terminated before the whole image is fully encoded, the regions of interest will have a higher fidelity than the rest of the image" (Paragraph 0042). The claimed limitation of "an operation process information generator for generating operation process information by analyzing editing and processing contents of said content information having layered structures or non-layered structures" is met by Figure 2. "FIG. 2 illustrates the storage of the multimedia data and the associated transcoder hints. As illustrated in FIG. 2, each multimedia packet includes associated transcoder hints. These transcoder hints are used by a transcoder to reformat the multimedia data in accordance with client capabilities, user preferences, link characteristics and/or network characteristics. It will be recognized that FIG. 2 is meant to be merely illustrative, and that the multimedia data and associated transcoder hints may not necessarily be stored in the manner illustrated in FIG. 2. As long as the multimedia data is associated with the particular transcoder hints, this

information can be stored in any manner. The type of transcoder hints which are stored depend upon the type of multimedia data" (Paragraph 0036).

In regard to claim 2, the claimed limitation of "an integrating means for integrating said content information, said internal structural information, and said operation process information" is met by Figure 1. " FIG. 1 illustrates various network components for the communication of multimedia data in accordance with exemplary embodiments of the present invention. The network includes a server 110, a gateway 120 and client 130. Server 110 stores multimedia data, along with transcoding hints, in multimedia storage element 113. Server 110 communicates the multimedia data and the transcoder hints to gateway 120 via bidirectional communication link 115. Gateway 120 includes a transcoder 125. Transcoder 125 reformats the multimedia data using the transcoder hints based upon client capabilities, user preferences, link characteristics and/or network characteristics. The transcoded multimedia data is provided to client 135 via bidirectional communication link 130. It will be recognized that bidirectional communication links 115 and 130 can be any type of bidirectional communication links, i.e., wireless or wire line communication links. Further, it will be recognized that the gateway can reside in the server 110 or in the client 135. In addition, the server 110 can be a part of another client, e.g., the server 110 can be a hard disk drive inside another client" (Paragraph 0035).

In regard to claim 5, the claimed limitation "said internal structural information includes at least any one of layered structural information of said content information having the layered structure or non-layered structure, combination information of said

Art Unit: 2614

content information having a plurality of non-layered structures: and structural combination information of said content information having the layered structure and non-layered structure” is met by Figure 4. “If the still image is stored in JPEG2000, a scaling based method for region of interest coding can be used. This region of interest scaling-based method scales up (shift up) coefficients of the image so that the bits associated with the region of interest are placed in higher bit-planes. During the embedded coding process of a JPEG2000 image, region of interest bits are placed in the bitstream before the non-region of interest elements of the image. Depending upon the scaling value, some bits of the region of interest coefficients may be encoded together with non-region of interest coefficients. Accordingly, the region of interest information of the image will be decoded, or refined, before the rest of the image if a full decoding of the bitstream results in a reconstruction of the whole image with the highest fidelity available. If the bitstream is truncated, or the encoding process is terminated before the whole image is fully encoded, the regions of interest will have a higher fidelity than the rest of the image” (Paragraph 0042).

In regard to claim 6, the claimed limitation of “said operation process information includes at least any one of a genre of said content information, a lapse of time from generating said content information, a service class of said content information, a system load of said content information, an information storage capacity of an external memory device, a network load, and a utilization frequency of said content information” is met by Figure 7. “The different prediction transcoding hints will have different characteristics that the transcoder can use as information in the determination of which

Art Unit: 2614

prediction method is the best to use at a particular moment in time based upon client capabilities, user preferences, link characteristics and/or network characteristics. These methods will vary in complexity and the amount of overhead bits they produce. The amount of overhead bits implicitly affects the quality of the video sequence. Compared to earlier hints, the computational complexity is now exactly known and thus the computational complexity parameter should be contained in the transcoder itself, and therefore, can be left out of the transcoding hints parameters" (Paragraph 0050).

In regard to claim 7, the claimed limitations of ""an internal structural information checking means for checking said internal structural information" and "an operation process information checking means for checking said operation process information" are met by Figures 1-3 (see Paragraphs 0035-0037). The claimed limitations of "a content information editing and processing means for deleting, restoring or adding a partial data of said content information based on results checked by said internal structural information checking means and said operation process information checking means", "an internal structural information analyzing and updating means for analyzing said internal structural information of said content information and updating said internal structural information" and "an operation process information analyzing and updating means for analyzing said operation process information of said content information and updating said operation process information" are met by Figure 3. "If the transcoder receives a request from the client for multimedia data ("YES" path out of decision step 330), the transcoder requests the multimedia data and transcoder hints from the server (step 340). The transcoder requests transcoder hints from the server based upon the

Art Unit: 2614

user preferences, client capabilities, link characteristics and/or network characteristics.

The transcoder receives the multimedia data and transcoder hints (step 350) and transcodes the multimedia data using the transcoder hints (step 360). Once the multimedia data has been transcoded, the transcoder forwards the multimedia data to the client (step 370). It will be recognized that the receipt of and storage of client capabilities, user preferences, link characteristics and/or network characteristics is normally only performed during an initialization process between the client and the transcoder. After this initialization process, the transcoder can request the transcoder hints from the server based upon these stored client capabilities, user preferences, link characteristics and/or network characteristics. However, it should also be recognized, that the user can update the client capabilities, user preferences, link characteristics and/or network characteristics at any time prior to the transcoder requesting multimedia data from the server" (Paragraph 0038). "If the still image is stored in JPEG2000, a scaling based method for region of interest coding can be used. This region of interest scaling-based method scales up (shift up) coefficients of the image so that the bits associated with the region of interest are placed in higher bit-planes. During the embedded coding process of a JPEG2000 image, region of interest bits are placed in the bitstream before the non-region of interest elements of the image. Depending upon the scaling value, some bits of the region of interest coefficients may be encoded together with non-region of interest coefficients. Accordingly, the region of interest information of the image will be decoded, or refined, before the rest of the image if a full decoding of the bitstream results in a reconstruction of the whole image with the highest

Art Unit: 2614

fidelity available. If the bitstream is truncated, or the encoding process is terminated before the whole image is fully encoded, the regions of interest will have a higher fidelity than the rest of the image" (Paragraph 0042).

Claim 8-10 is met by that discussed above for claim 7 (see Paragraph 0036-0045).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christopoulos.

In regard to claims 3-4, Christopoulos fails to explicitly disclose separating the operational process information, the content information and the internal information. However, the Examiner takes official notice that it is notoriously well known in the art to separate data that has been integrated so as to use the individual components. Consequently, it would have been obvious to one of ordinary skill in the art to implement Christopoulos with separating the operational process information, the content information and the internal information for the stated advantage.

Art Unit: 2614

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Christopoulos in view of Moroney (US Pat No 6,532,593).

In regard to claim 11, Christopoulos fails to explicitly disclose the claimed limitation of “a data capacity checking means for checking whether a total amount of a data capacity of said content information is within a range of a predetermined capacity, and in which, when said total amount is larger than said predetermined capacity, a partial data of said content information is deleted”. Moroney teaches “a data capacity checking means for checking whether a total amount of a data capacity of said content information is within a range of a predetermined capacity, and in which, when said total amount is larger than said predetermined capacity, a partial data of said content information is deleted” so as to allow the user to balance the quantity and quality of stored video data (See Col 2, Lines 15-32 and Col 8, Lines 3-26). Consequently, it would have been clearly obvious to one of ordinary skill in the art to modify Christopoulos with “a data capacity checking means for checking whether a total amount of a data capacity of said content information is within a range of a predetermined capacity, and in which, when said total amount is larger than said predetermined capacity, a partial data of said content information is deleted” for the stated advantage.

5. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christopoulos in view of Laksono et al (US Pat App Pub No 2003/0046704).

In regard to claim 12, Christopoulos fails to explicitly disclose the claimed limitations of “a user checking means for checking whether a user is a registered one

when said content information is utilized", "a user registration processing means for said user when said user checking means registering determines that said user has not been registered", "a fee presentation means for indicating fees in accordance with said content information", "a fee payment means for paying said fees indicated by said fees presentation means", a fee imposing process means for imposing said fees when said fee payment information checking means determines that said fees paid by said fee payment means are correct" and "an information transmitting means for transmitting said content information when said fee payment information checking means determines that said fees paid by said fee payment means are correct". Laksono teaches the claimed steps of "a user checking means for checking whether a user is a registered one when said content information is utilized", "a user registration processing means for said user when said user checking means registering determines that said user has not been registered", "a fee presentation means for indicating fees in accordance with said content information", "a fee payment means for paying said fees indicated by said fees presentation means"; a fee imposing process means for imposing said fees when said fee payment information checking means determines that said fees paid by said fee payment means are correct" and "an information transmitting means for transmitting said content information when said fee payment information checking means determines that said fees paid by said fee payment means are correct" so as generate revenue for the cable provider while controlling the bandwidth utilization of the network (see Paragraphs 0014, 0017, 0021, 0022, 0028). Consequently, it would have been clearly obvious to one of ordinary skill in the art to modify Christopoulos with "a

Art Unit: 2614

user checking means for checking whether a user is a registered one when said content information is utilized", "a user registration processing means for said user when said user checking means registering determines that said user has not been registered", "a fee presentation means for indicating fees in accordance with said content information", "a fee payment means for paying said fees indicated by said fees presentation means", a fee imposing process means for imposing said fees when said fee payment information checking means determines that said fees paid by said fee payment means are correct" and "an information transmitting means for transmitting said content information when said fee payment information checking means determines that said fees paid by said fee payment means are correct" for the stated advantage. The aforementioned combined teaching fails to explicitly disclose the claimed limitation of "a payment information checking means for checking whether said fees paid by said fee payment means are proper". However, the Examiner takes official notice that it is notoriously well known in the art to utilize payment information checking means "for checking whether said fees paid by said fee payment means are proper" so as to ensure the provider receives compensation for the provided services. Consequently, it would have been obvious to one of ordinary skill in the art to implement the combined teaching with "a payment information checking means for checking whether said fees paid by said fee payment means are proper" for the stated advantage.

Claims 13-15 are met by that discussed for claim 12.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Suzuki (US Pat No 6,611,262)
- Kalra et al. (US Pat No 5,953,506)

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Manning whose telephone number is 571-272-7352. The examiner can normally be reached on M-F: 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/007,611
Art Unit: 2614

Page 13



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600